

ABSTRACT

The present invention features G-protein fusion receptors and chimeric GABA<sub>B</sub> receptors (GABA<sub>B</sub>Rs), nucleic acid encoding such receptors, and the use of such receptors and nucleic acid. G-protein fusion receptors comprise at least one domain from a CaR, a 5 mGluR, and/or a GABA<sub>B</sub> receptor fused directly or through a linker to a guanine nucleotide-binding protein (G-protein). Chimeric GABA<sub>B</sub>Rs comprise at least one of a GABA<sub>B</sub>R extracellular domain, a GABA<sub>B</sub>R transmembrane domain, or a GABA<sub>B</sub>R intracellular domain and one or more domains from a mGluR subtype 8 (mGluR8) and/or a CaR.